

### **REMARKS**

Claims 1-78 are now present in this application, with new claims 55-78 being added by the present Amendment. Currently, claims 1, 14, 27, 40, 45 and 50 are independent.

### **Oath/Declaration**

Applicants note that the objection to the Oath/Declaration is no longer present in this Office Action. Thus, Applicants presume that the objection has been withdrawn. Further, Applicants note that a new Supplemental Declaration was submitted on March 17, 2005, which is further believed to overcome the Examiner's objection. Acknowledgement of entry of this Supplemental Declaration is respectfully requested.

### **Discussion of Example Embodiments**

In one example embodiment of the present application, morphing functions are combined with symbol sequencing by the use of dependent symbols. A dependent symbol is one which will trigger the use of morphing macros.

One example of a dependent symbol may be the "dinosaur" symbol. The dinosaur represents past tense and thus is used, in combination with other symbols forming other dependent symbol sequences, to trigger the verb morphing macro to formulate the past tense of certain stored words.

For example, assuming that the taxi symbol is a first symbol entered by the user and the dinosaur symbol is the next symbol, the taxi symbol plus the dinosaur symbol **does not complete a regular symbol sequence**. Thus, there is **no symbol sequence** of the taxi plus the dinosaur which **is stored in association with a word, message or phrase** which can be accessed. Accordingly, input of another symbol is awaited wherein, when the "ich" symbol is entered, the taxi, plus the dinosaur, plus the "ich"

symbol is checked to see if it creates a regular symbol sequence. In this example, it does not.

However, the “ich” symbol is a dependent symbol, and it is part of a dependent symbol sequence (namely, a **sequence of symbols dependent upon** at least one other symbol). This system recognizes this, in essence substitutes the target of the dependent symbol sequence for the dependent symbol sequence to produce a regular symbol sequence. It therefore in essence substitutes the “wir” symbol for the “dinosaur plus ich” dependent symbol sequence, to form the sequence that would normally access the word “fahren”. However, the word “fahren” **is then retrieved, along with the appropriate morphing data** and the appropriate insertable morphing functions such that the word “fuhr”, the past tense of fahren, is then generated.

As such, a plurality of symbols are received, it is determined whether or not the plurality of symbols include a **sequence of symbols dependent upon** at least one other symbol, and a stored word is then morphed in response to determining that the plurality of input symbols include a dependent sequence, to produce at least one modified form of the stored word.

### **Prior Art Rejections**

Claims 1-39 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Steele et al. (the Steele ‘342 patent). This rejection is respectfully traversed.

### **Steele et al.**

The Steele ‘342 patent is directed to an interactive communication system designed for users such as an aphasic patient. Aphasics typically have deficiencies, cannot easily understand language, and typically have problems with syntax. The device includes a display of a plurality of images, with **each image being a graphical representation of a word** or phrase

(see figure 13E including the measuring cup for example, and/or the various symbols for the chef, the pouring, etc. of figure 13G).

As indicated above, aphasics typically have problems with syntax. Thus, as indicated in column 3 of the Steele '342 patent, the patent does deal with syntax. This syntax analysis typically is done in conjunction with two adjacent symbols, wherein **each symbol has a separate word associated with it** and wherein at least one of the words may be altered based upon **a single proceeding adjacent symbol** as discussed in column 4. Specifically, as discussed in column 5, if a dog and walk symbol are selected, the phrase "dog walks" will be output.

#### **Distinctions over the Steele '342 Patent**

The Steele '342 patent fails to teach or suggest at least a method "determining whether or not the plurality of symbols include **a sequence of symbols dependent upon** at least one **other symbol**" as well as "morphing a stored word **corresponding to a symbol sequence** including the at least one other symbol", as set forth in claim 1. In the Steele '342 patent, each symbol corresponds to a specific word (the chef symbol corresponds to a chef, the pour symbol corresponds to a pouring action, the measuring cup symbol corresponds to a measuring cup, etc.). Although the patent does not specifically describe how this occurs, the system does appear to recognize which symbol corresponds to the subject and which symbol corresponds to the verb, and further appears to somehow correlate a singular verb form with a singular noun form ("the chef pours" as shown in figure 13G for example). Accordingly, one symbol may thus in some way relate to another symbol, and its corresponding word output may be modified. However, this kind of a system as set forth in the Steele '342 patent still fails to meet the claim limitations of claim 1.

In claim 1, a plurality of symbols are input, and it is determined whether or not the plurality of symbols include **"a sequence of symbols dependent upon at least one other symbol"**. Thus, by referring to a **"sequence of symbols"**, this clearly refers to at least two symbols being

dependent upon at least one other symbol. In the example set forth in the Steele '342 patent, the pour symbol is not really dependent upon the chef symbol, but it is somehow related to the chef symbol. However, in **the Steele '342 patent** it is at best, **a one to one correspondence** and **not a sequence of symbols which is dependent** upon at least **one other symbol**.

To the contrary, for example, a dinosaur symbol may be **part of a dependent sequence** in the present application, and can represent past tense. But it is only **part of a dependent sequence, namely one of a plurality of symbols**. The user then can choose the dinosaur symbol if he desires past tense, and can then choose the ich symbol for example to be part of its dependent sequence. Accordingly, withdrawal of the rejection of claim 1 is requested.

Further, as set forth in claim 55, the dependent sequence of symbols may not include a word corresponding thereto, such as the dinosaur and ich symbol sequence not corresponding to any particular word. Further, as set forth in claim 59, the dependent sequence of symbols may include at least one symbol only selected to control morphing, for example, such as the dinosaur symbol controlling verb tense for example. Thus, for example, the symbol sequence of the dinosaur and the ich symbol is a sequence of symbols (more than one symbol) dependent upon at least one other symbol. There is no such sequence of symbols dependent upon at least one other symbol as shown in the Steele '342 patent. Each symbol is independent of the other and independently stands for its own word, noting that a stored word could arguably change based upon one other proceeding symbol.

In addition, the Steele '342 patent also fails to teach or suggest "morphing **a stored word** corresponding to a **symbol sequence** including the at least one other symbol", as claimed in claim 1. Thus, the word that is morphed is one which corresponds to a symbol sequence, **and not just a single symbol as shown in the Steele '342 patent**. For example, the Examiner argues that the word "pour" is morphed into the word "pours" in the Steele '342 patent. However, the **word "pour" corresponds only to the "single" pouring symbol**, and does not correspond to any type of symbol

sequence. Accordingly, for at least such reasons, Applicants respectfully submit that the Steele '342 patent fails to teach or suggest the present invention as set forth in claim 1.

With regard to independent claims 14 and 27, these claims are allowable for reasons at least somewhat similar to those set forth in claim 1, although each claim should be interpreted solely based upon the limitations present therein. Accordingly, withdrawal of the rejection of each of independent claims 1, 14 and 27, as well as the various dependent thereon, is respectfully requested.

#### **Freeman '233 Patent**

The Examiner has further rejected claims 40-54 under 35 U.S.C. § 102(b) as being anticipated by Freeman (the Freeman '223 patent). This rejection is respectfully traversed.

Claim 40 is directed to a word prediction method which not only displays a plurality of selectable words, but which also **displays morphs of a selected word** for further selection. At least such a feature is not taught or suggested by the Freeman '223 patent.

The Freeman '223 patent is directed to a word based text producing system. The system is a chord type of system used by stenographers. The system appears include some type of basic word prediction system wherein when a letter is input, **words beginning with that input letter are displayed for selection** (see **Table B** of column 10 for example), and wherein upon two letters being input, **words beginning with those two letters are displayed for selection** (See **Table C** of column 10 for example). The Examiner cites various aspects of column 8 and column 10, alleging that these correspond to the claimed features. However, Applicants respectfully disagree.

Column 8 Freeman '223 patent references inflections and endings, and indicates that some type of inflections and endings are output. However, there is clearly no mention of displaying a plurality of selectable

words, and then **subsequently displaying morphs of the selected words for further selection.**

When looking further at the aspect of inflection sets as set forth in column 12, line 55 to column 13, line 13 of the Freeman '223 patent, it appears that a display of suffixes actually occurs, and **not a display of morphs further selection.** For example, the display of figures 3A and 3B is not a display of morphs of a selected word for further selection, as claimed. The Freeman '223 patent appears to be nothing more than a basic word prediction system which also may have something to do with modified words or inflection data, but which clearly does not teach or suggest the aspects of displaying a plurality of selectable words and displaying morphs of a selected word for further selection as claimed in claim 40. Accordingly, withdrawal of the Examiner's rejection is respectfully requested.

With regard to independent claims 45 and 50, these claims are allowable for reasons somewhat similar to those previously set forth regarding independent claim 40, while each claim should be interpreted only based upon the limitations present therein.

Additionally, with regard to the dependent claims, these claims are allowable for at least the reasons previously presented regarding their corresponding independent claims.

Accordingly, withdrawal of the Examiner's rejection is respectfully requested.

### **New Claims**

As briefly addressed above, Applicants have added new claims 55-78 in an effort to further define Applicants invention. These dependent claims are allowable for at least the reasons previously presented regarding their corresponding independent claims, and for at least additional reasons. For example, claim 55 refers to the dependent of sequence of symbols not including a word corresponding thereto. **As each symbol in the Steele '342 patent does include a corresponding word,** the Steele '342 patent would fail to teach or suggest such a limitation. As set forth in claim 56, at

least one symbol in the dependent sequence is polysemous or multi-meaning, wherein each of the symbols in the Steele '342 patent are clearly single meaning symbols.

Further, in claim 57, at least one symbol of the dependent sequence dictates a type of morphing to be done to a stored word, such as the dinosaur symbol dictating past tense for example. No such symbol dictating the type of morphing to be done is shown in the **Steele '342 patent**, as **every symbol corresponds to a word itself**, and does not merely dictate a type of morphing to be done. Claim 58 further clarifies that the morphing includes verb tense, which is also not taught or suggested by the Steele '342 patent. Claim 59 references the dependent sequence of symbols includes at least one symbol only selected to control morphing, and claim 60 indicates that at least one symbol does not have a word corresponding thereto. Again, each of claims 59 and 60 are also not taught or suggested by the Steele '342 patent. With regard to remaining claims 61-75, these claims are also not taught or suggested by the Steele '342 patent.

Still further, new claim 76 sets forth that morphs are automatically displayed for further selection upon selection of a displayed word. This **automatic display of morphs** for further selection **is not taught or suggested by the Freeman '223 patent**. Similar arguments apply to new claims 77 and 78.

### **CONCLUSION**

Accordingly, in view of the above amendments and remarks, reconsideration of all outstanding objections and rejections and allowance of each of claims 1-78 in connection with the present application is earnestly solicited.


Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants hereby petition for a one (1) month extension of time for filing a reply to the outstanding non-final Office Action and submit the required \$60.00 (small entity) extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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